

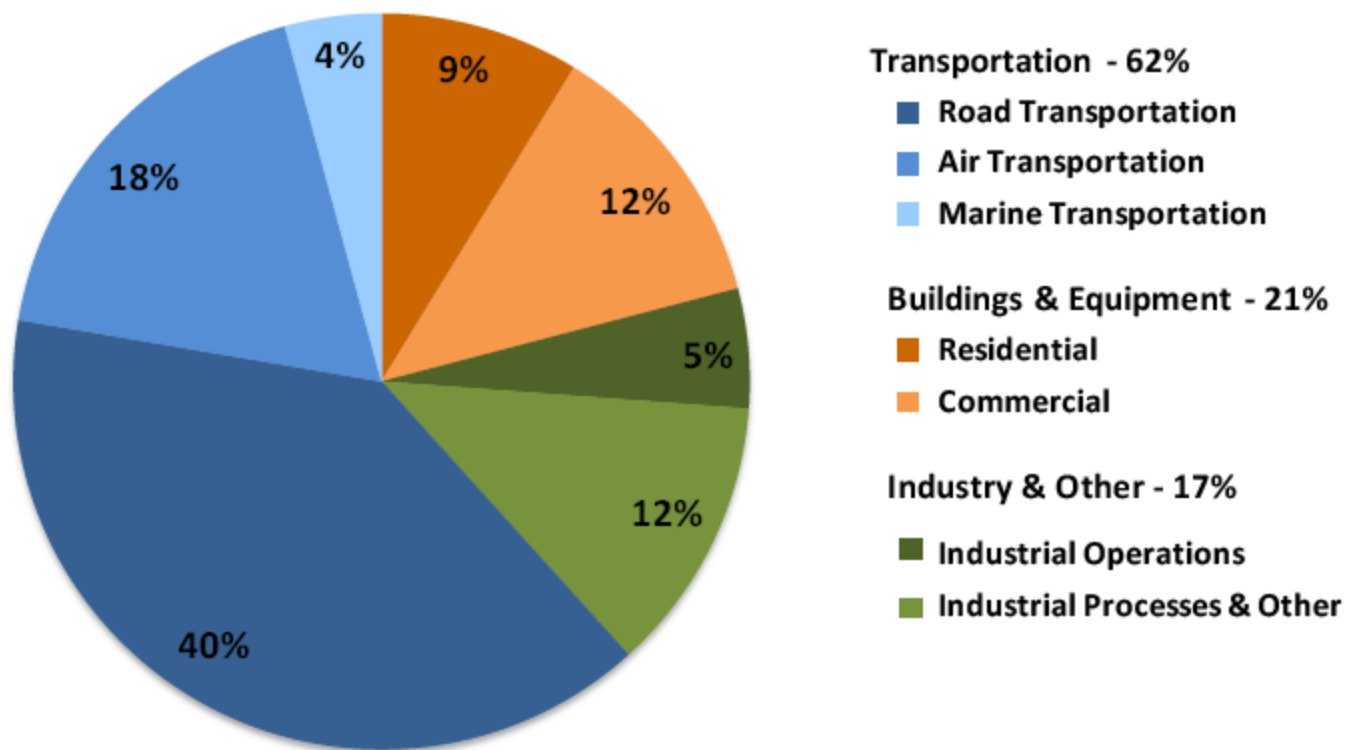
Transportation Sector

Carbon Neutrality in the
Transportation Sector

September 14th, 2010

Context – Emissions

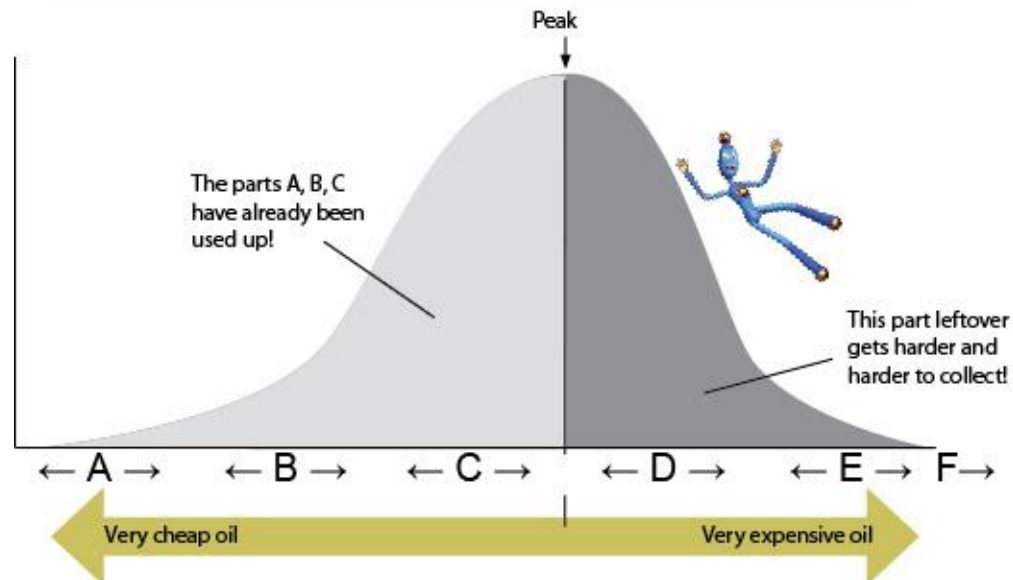
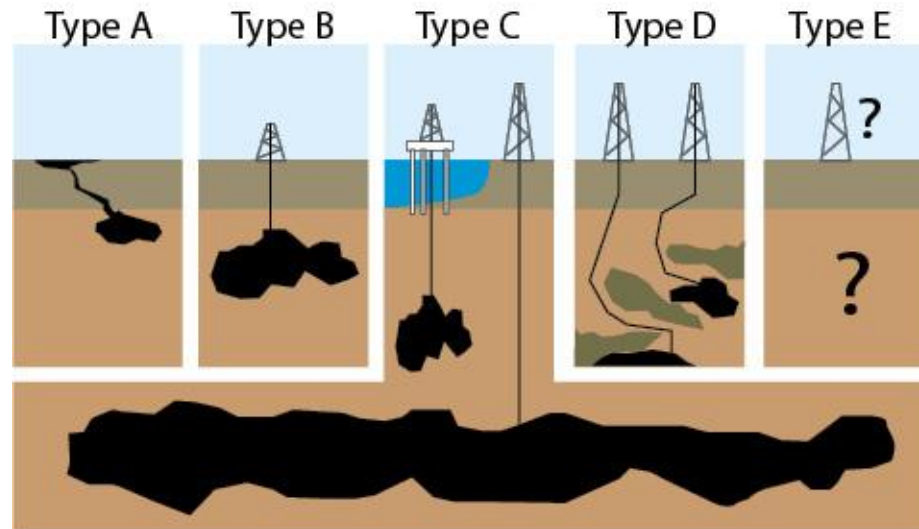
2008 Citywide Emissions by Sector



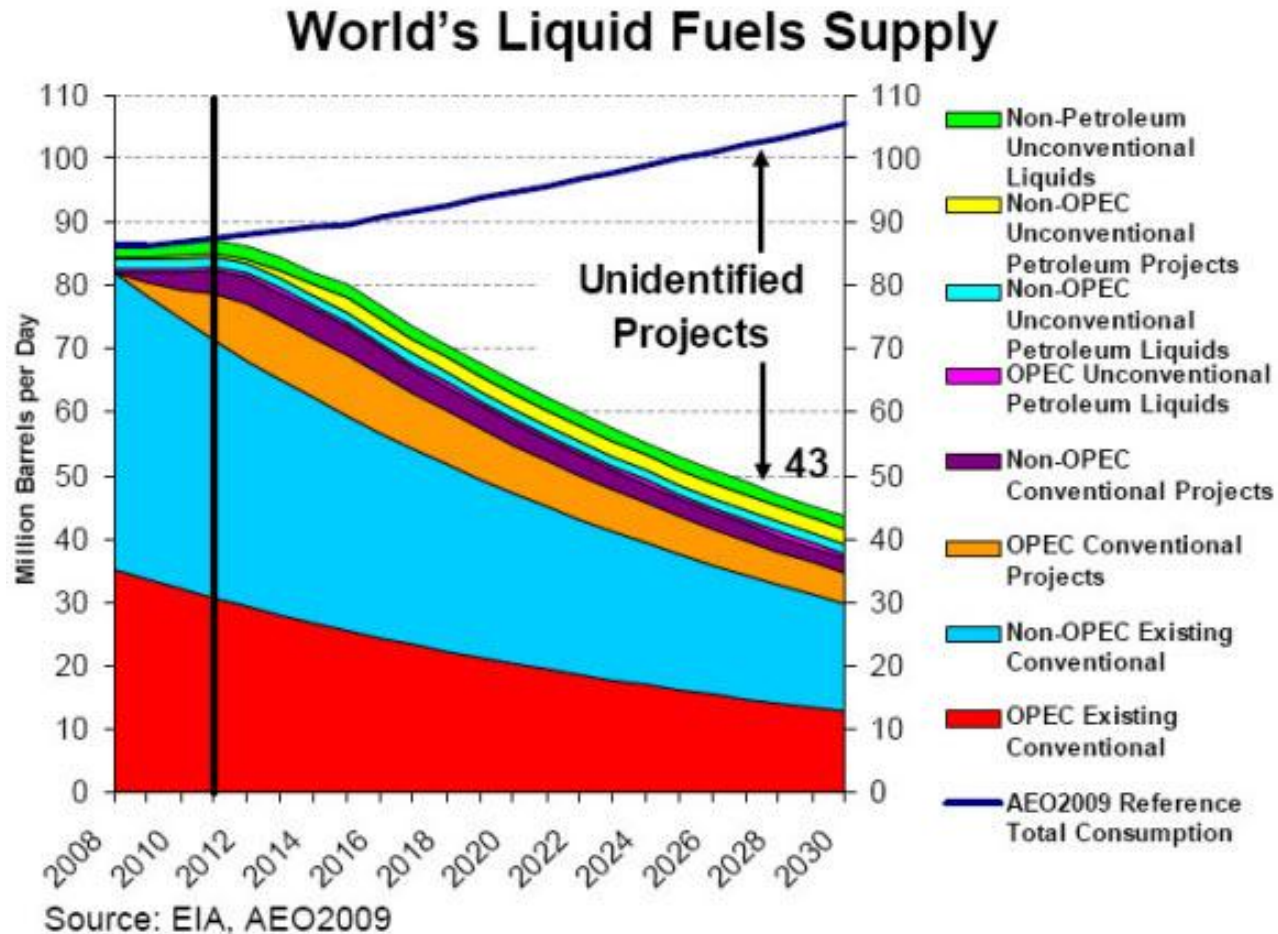
Context – Existing Recommendations

- **Transportation Implementation Working Group – 2008**
- **Seattle Climate Action Plan – 2006**
- **City of Seattle GHG Inventory – 2008**

Context – Peak Oil



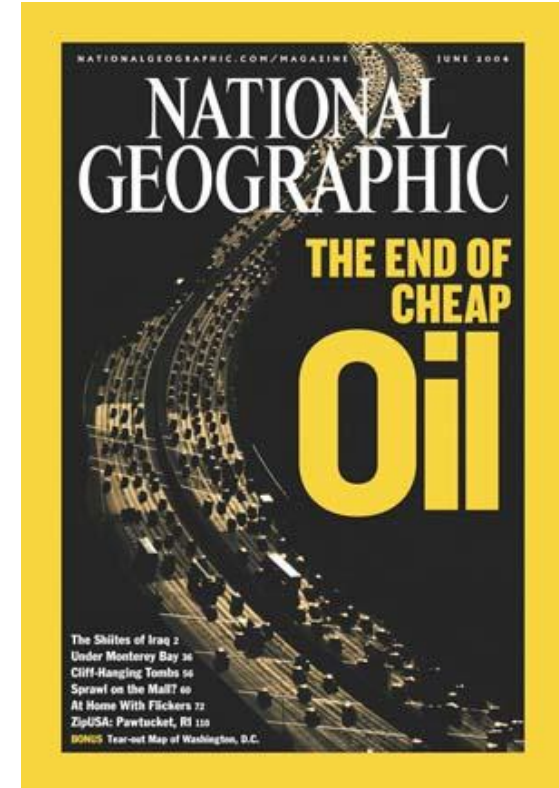
Context – Peak Oil



Context – Peak Oil

“The days of inexpensive, convenient, abundant energy are quickly drawing to a close.” – US Army, 2005

“...a shortfall of oil supplies caused by world conventional oil peaking will sharply increase oil prices and oil price volatility.” – US Dept. of Energy, 2006



Strategies

- **Planning**
- **Pricing**
- **Priorities**

Strategies – Land Use and Transportation



Strategies – Pricing



Strategies – Infrastructure Priorities



Priorities – Infrastructure Priorities



Conclusion

- **Planning**
 - Integrate transportation and land use planning
 - Compact, walkable neighborhoods
- **Pricing**
 - Disincentivize driving
 - Incentivize walking, bicycling and transit
- **Priorities**
 - Prioritize walking, bicycling and transit over automobile use

Questions

????????????????

Energy and Climate Uncertainty

Whitechuck Glacier – 1973



Whitechuck Glacier – 2006



Peak Oil

The Importance of Oil:

- Transportation (**97% of fuel**)
- Pharmaceuticals
- Agricultural Products (oil-based pesticides)
- Chemicals and Plastics
- National Defense
- Home Heating
- Food Production and Distribution

Peak Oil

Alternatives to Oil – EROI:

- Deepwater and Polar Oil
 - Risky and Expensive
- Tar Sands and Oil Shale
 - Environmental Disaster
- Coal
 - Environmental Disaster
- Nuclear
 - Fuel Supply, Safety, Cost
- Hydrogen
 - Energy Carrier
- Biofuels
 - Food vs. Fuel

